

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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PJ

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/684,988	10/10/00	JACK	A 003300-688

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 EXAMINER

GONZALEZ, J

ART UNIT	PAPER NUMBER
	2834

DATE MAILED: 03/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/684,988	JACK ET AL.
	Examiner	Art Unit
	Julio C. Gonzalez	2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 October 2000 is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) Notice of References Cited (PTO-892)
- 16) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.
- 18) Interview Summary (PTO-413) Paper No(s) _____.
- 19) Notice of Informal Patent Application (PTO-152)
- 20) Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the single winding, electrical supplies in claims 1 and 2 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. The drawings are objected to because in figure 1, teeth 7 points to an empty space. Correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, applicant discloses "electrical supplies" shifted by 180° electrical so as to reduce the effect of other harmonics". What are these electrical supplies and how can they reduce the effect of the harmonics? How the angle and the shifting affect the harmonics? Also, "an angle related to skew, and then n/2 of the stator sections" needs more clarification.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 8-12 and 17-21 are rejected under 35 U.S.C. 102(b) as being anticipated by Burgbacher et al.

Burgbacher et al discloses rotor 20 and a stator for an electrical induction machine, comprising an even number n of stator sections at different axial positions, each section having a plurality of circumferentially separated, radially teeth (see figure 9a), wherein the stator sections are mutually phase shifted by substantially $360^\circ/n$ electrical \pm an angle related to skew. Also, each stator section has the same number of teeth (see figure 9a) and each stator section is made of several separate units, each unit comprising a tooth and an adjoining part of a yoke. Moreover, each unit comprises one of single windings (column 8, lines 44, 45) and the adjoining parts of the yoke extend axially past the teeth. Also, the tips of the teeth extend axially past the main part of the teeth and each teeth has a rounded profile (see figure 9a) and stator sections are separated axially (see reference numeral 320).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 4-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burgbacher et al in view of Suzuki et al.

Burgbacher et al discloses rotor 20 and a stator for an electrical induction machine, comprising an even number n of stator sections at different axial positions, each section having a plurality of circumferentially separated, radially teeth (see figure 9a), wherein the stator sections are mutually phase shifted by substantially $360^\circ/n$ electrical \pm an angle related to skew. Also, each stator section has the same number of teeth (see figure 9a) and each stator section is made of several separate units, each unit comprising a tooth and an adjoining part of a yoke. Moreover, each unit comprises one of single windings (column 8, lines 44, 45) and the adjoining parts of the yoke extend axially past the teeth. Also, the tips of the teeth extend axially past the main part of the teeth and each teeth has a rounded profile (see figure 9a) and stator sections are separated axially (see reference numeral 320).

However, Burgbacher et al does not disclose the use of magnetic powder. On the other hand, Suzuki et al discloses for the purpose of making electromagnetic steel plates for the stator teeth, that the pole teeth 12 could be made of magnetic powder (column 4, lines 29-34 & see figure 7).

It would have been obvious to one having ordinary skill in the art to make a stator with a rotor, yoke, teeth axially positioned and with winding around each tooth and with the tips of the teeth extending axially past the main part of the teeth as disclosed by Burgbacher et al and to use magnetic powder for the purpose of making electromagnetic steel plates for the stator teeth as disclosed by Suzuki et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julio C. Gonzalez whose telephone number is (703) 305-1563. The examiner can normally be reached on M-F (8AM-5PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



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Jcg

March 8, 2001